

Remarks

This case has been carefully considered in light of the Office Action dated June 6, 2005 wherein: claims 1-9 were rejected under 35 USC 112, first paragraph; and claims 1-9 were rejected under 35 USC 103(a) on Champagne et al. and Mendel. Reconsideration is respectfully requested.

Claims 1-9 remain pending in this case.

Claim 1 has been amended to recite: “after sending said messages to all of said other nodes, setting the status of said sending process to idle.” Claims 5 and 9 have been similarly amended. This clarifies that the step of setting the status of the sending process to idle is performed after the messages have been sent to all the other nodes. Support for this amendment is found in paragraph [0024] on page 7 of the specification, and in step 3 of the process diagram of Figure 2.

Applicants respectfully traverse the rejection of claims 1-9 under 35 USC 112, first paragraph, for the following reasons.

On page 4 of the Office Action, it is stated that “[t]here is no disclosure [sic] anywhere in the specification as originally filed of ‘said number of nodes being the same as the number of said plurality of messages.’” The applicants respectfully submit that there is support in the specification for the recited claim limitation. On page 5, paragraph [0016], lines 2-3, the applicants state that “a plurality of nodes (**100.1 through 100.n**) are connected by means of a network connection 140.” [emphasis added] Then, on page 6, paragraph [0018], lines 1-2, the applicants state that “one of the objects and functions of the present invention is to send a message to a plurality of identifiable nodes, all of which are expected to send a reply to the sending node.” The applicants further state in paragraph [0019] the following:

In the examples provided herein, it is noted that, for ease of presentation and understanding, the same message Y is assumed to be sent to each node. However, the present invention is not so limited. In particular, different messages can be sent to different nodes without departing from the scope or purpose of the present invention. **The sender can indeed select different messages Y₁, Y₂, ..., Y_n to go to each receiver node. Each receiver can send a**

different (or the same) response back to the sender. [emphasis added]

The applicants respectfully submit that it is clear from the language of the specification, quoted above, that the number of nodes is the same as the number of messages sent, i.e.: “The send can indeed select **different messages Y_1, Y_2, \dots, Y_n to go to each receiver node.** Further to this point, the applicants respectfully point out that the use of the variable **n** indicating the number of nodes (**100.1 through 100.n**) corresponds directly to the number of messages **Y_1, Y_2, \dots, Y_n to go to each receiver node.**

For the above reasons, the applicants believe that the written description requirement of 35 USC 112 has been satisfied, and thus respectfully request the withdrawal thereof.

The applicants respectfully traverse the rejection of claims 1-9 on Champagne in view of Mendel under 35 USC 103 for the following reasons.

The patent to Champagne et al. is about transmitting data between a pair of transceivers A and B connected by a physical data link (or two-way alternate message channel) 10. Specifically, Champagne describes how data is transferred across the link. The IDLE status in Champagne refers to the link 10 as being empty, i.e., available for the next data packet.

In contrast to Champagne et al., the applicants have provided a way to efficiently transfer a plurality of messages to a plurality of nodes. In particular, the applicants address **node level data transfer**, while Champagne et al. deal with **link level data transmission**. Moreover, the “idle” state in the applicants’ system indicates that the sending process has released the CPU for other processing jobs, while the “IDLE” state in Champagne describes an empty link (or two-way alternate message channel) 10 between two transceivers A and B. Thus, the “IDLE” state in Champagne has a completely different meaning and performs a totally different function from the applicants’ sending process “idle” state, as recited in amended claim 1, to wit: “**after sending said messages to all of said other nodes, setting the status of said sending process to idle.**”

In fact, the applicants' sending process "idle" state may be accurately described as blocking the sending process from consuming CPU cycles. This is how the term "idle" is described in the specification on for example page 1, paragraph [0001], lines 5-10: and on page 3, paragraph [0007]. Or, as explained in yet other words in the specification, the applicants' "idle" state may be further described as an inactive or "sleep" state. This is presented in the specification, for example, on page 2, lines 11-12; on page 7, paragraph [0024]; and page 9, lines 1-2.

Therefore, the applicants' sending process "idle", or "blocking", or "sleeping" state is a state into which the sending process is driven into upon after sending messages to all other nodes in the system. The sending process is put into this state in order to avoid consuming CPU cycles and thereby improve efficiency. By way of contrast, the "IDLE" state of the data link 10 in Champagne is described as a state of availability. That is, once in the "IDLE" state, Champagne's link 10 is available for another data packet. Thus, even though the applicants and Champagne use the same term "idle", this term is clearly used differently by Champagne and the applicants.

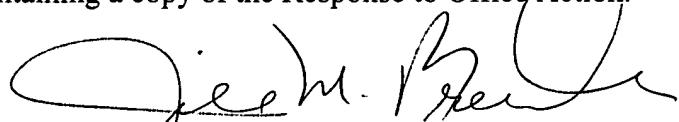
The Mendel patent describes how to perform a fence/unfenced operation upon receiving a request. Although the applicants agree that fence/unfenced messages are sent among a plurality of nodes, Mendel does not deal with how those messages are sent, but rather with how action is taken after receiving the messages. Totally unlike Mendel, the applicants deal with message processing using a sending process, as recited in amended claims 1-9.

The applicants respectfully submit that it would be impossible to use the Mendel patent to modify the method of Champagne because Mendel's patent does not in any way describe how to transfer data messages. Mendel does not describe how the fence/unfenced messages are sent and received, but how the action is taken after receiving the request and how to prevent those nodes that have been fenced from accessing. On the other hand, Champagne's patent deals with how to transmit data over a physical link connecting a pair of transceivers. The applicants thus respectfully submit that it would be impossible to combine these two references, as suggested. However, even assuming *arguendo* that they could be combined, the suggested combination would not result in a method for transferring a plurality of messages to a plurality of nodes, as

recited by the applicants in amended claims 1-9. These claims are thus believed to be patentable over the suggested combination of Champagne and Mendel under 35 USC 103.

For the foregoing reasons, the applicants believe that claims 1-9, particularly as amended, are patentable to the applicants. Reconsideration and allowance of these claims, as amended, are respectfully requested.

Should the Examiner have any further concerns regarding this application, he is invited to contact Applicants' representative at the below listed number. As requested by the Examiner, enclosed herewith is a diskette containing a copy of the Response to Office Action.



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